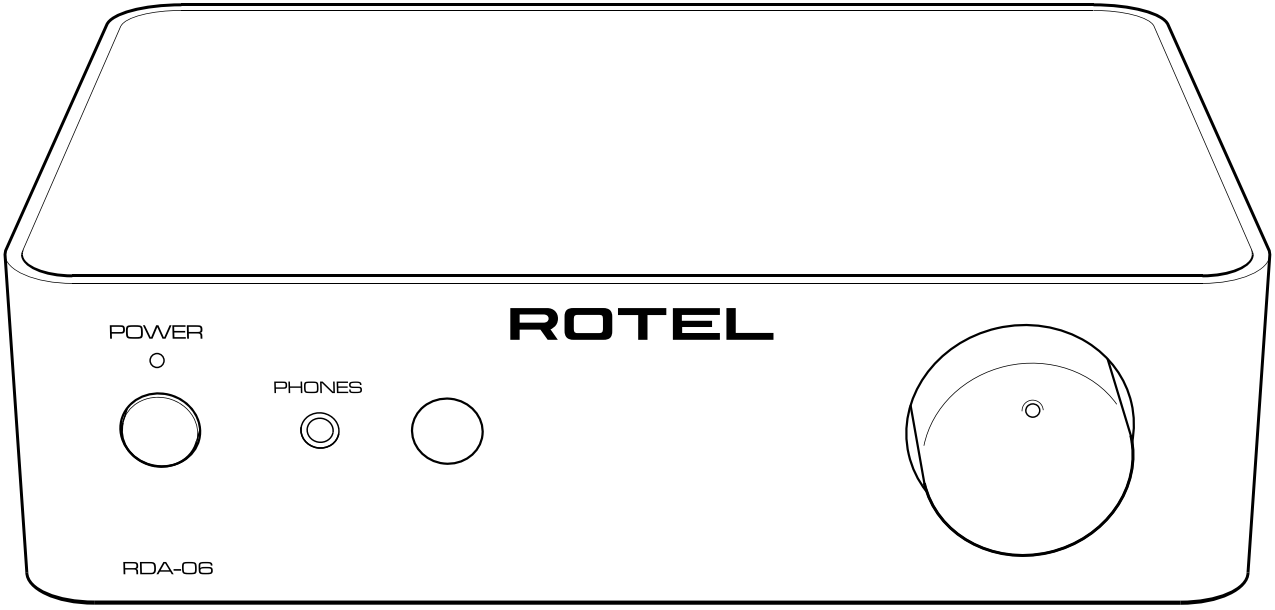


ROTEL®

RDA-06

Integrated Amplifier
Owner's Manual

Contents

Important Safety Instructions 3
Figure 1: Controls and Connections 5
Figure 2: Remote Control 6
Figure 3: Inputs and Speaker Outputs Connections 7
Important Notes 8
About Rotel 10
Getting Started 11
A Few Precautions 11
Placement 11
Power and Control 12
Power Input [9] 12
Power Switch [1] and Indicator Light [2] 12
Input Signal Connections [6] 13
Speaker Outputs 13
Speaker Selection 13
Speaker Wire Selection 13
Polarity and Phasing 13
Speaker Connections [8] 14
Headphone Output [3] 15
Remote Sensor [4] 15
Rear USB Upgrade [7] 15
Troubleshooting 16
Power Indicator Is Not Illuminated 16
No Sound 16
Specifications. 17

Important Safety Instructions

WARNING: There are no user serviceable parts inside. Refer all servicing to qualified service personnel.

WARNING: To reduce the risk of fire or electric shock, do not expose the unit to moisture or water. Do not expose the unit to dripping or splashing. Do not place objects filled with liquids, such as vases, on the unit. Do not allow foreign objects to get into the enclosure. If the unit is exposed to moisture, or a foreign object gets into the enclosure, immediately disconnect the power cord from the wall. Take the unit to a qualified service person for inspection and necessary repairs.

Read all the instructions before connecting or operating the component.

Keep this manual so you can refer to these safety instructions.

Heed all warnings and safety information in these instructions and on the product itself. Follow all operating instructions.

Clean the enclosure only with a dry cloth or a vacuum cleaner.

Do not use this unit near water.

Do not place the unit on a bed, sofa, rug, or similar surface that could block the ventilation openings. If the unit is placed in a bookcase or cabinet, there must be ventilation of the cabinet to allow proper cooling.

Keep the component away from radiators, heat registers, stoves, or any other appliance that produces heat.

WARNING: The rear panel power cord connector is the mains power disconnect device. The apparatus must be located in an open area that allows access to the cord connector.

The unit must be connected to a power supply only of the type and voltage specified on the rear panel. (USA: 120 V/60Hz, EC: 230V/50Hz)

Connect the component to the power outlet only with the supplied power supply cable or an exact equivalent. Do not modify the supplied cable. A polarized plug has two blades, with one wider than the other. A grounding plug has two blades plus a third grounding prong. These are provided for your safety. Do not defeat grounding and/or polarization safety provisions. If the supplied plug does not fit your outlet, please consult an electrician for replacement of the obsolete outlet. Do not use extension cords.

The main plug of the power cordset is a disconnect device of the apparatus. In order to completely disconnect the apparatus from the supply mains, the main plug of the power cordset should be unplugged from the mains (AC) outlet. The stand-by LED indicator will not be lit up to show the power cord is unplugged. The disconnect device shall remain readily operable.

Do not route the power cord where it will be crushed, pinched, bent, exposed to heat, or damaged in any way. Pay particular attention to the power cord at the plug and where the cord exits the back of the unit.

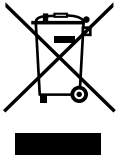
The power cord should be unplugged from the wall outlet during a lightning storm or if the unit is to be left unused for a long period of time.

Use only accessories specified by the manufacturer.

Immediately stop using the component and have it inspected and/or serviced by a qualified service agency if:

- The power supply has been damaged
- Objects have fallen or liquid has been spilled into the unit
- The unit has been exposed to rain
- The unit shows signs of improper operation
- The unit has been dropped or damaged in any way

The batteries in the remote control should not be exposed to excessive temperature such as sunshine, fire or other heat sources.



Rotel products are designed to comply with international directives on the Restriction of Hazardous Substances (RoHS) in electrical and electronic equipment and the disposal of Waste Electrical and Electronic Equipment (WEEE). The crossed wheelie bin symbol indicates compliance and that the products must be appropriately recycled or processed in accordance with these directives.

This symbol means that this unit is double insulated. An earth connection is not required.

CE

CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN
CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER. NO USER-SERVICEABLE PARTS INSIDE REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

APPLICABLE FOR USA, CANADA OR WHERE APPROVED FOR THE USAGE

CAUTION: TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE OF PLUG TO WIDE SLOT. INSERT FULLY.

ATTENTION: POUR EVITER LES CHOCS ELECTRIQUES, INTRODUIRE LA LAME LA PLUS LARGE DE LA FICHE DANS LA BORNE CORRESPONDANTE DE LA PRISE ET POUSSER JUSQU AU FOND.

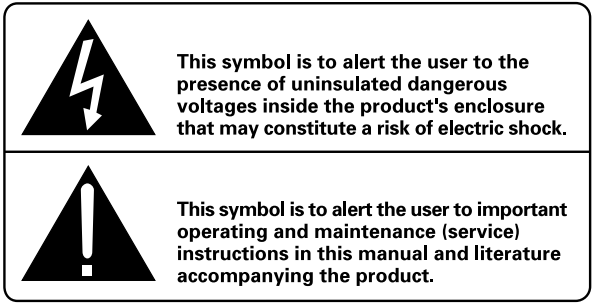

This symbol is to alert the user to the presence of uninsulated dangerous voltages inside the product's enclosure that may constitute a risk of electric shock.
This symbol is to alert the user to important operating and maintenance (service) instructions in this manual and literature accompanying the product.

Figure 1: Controls and Connections

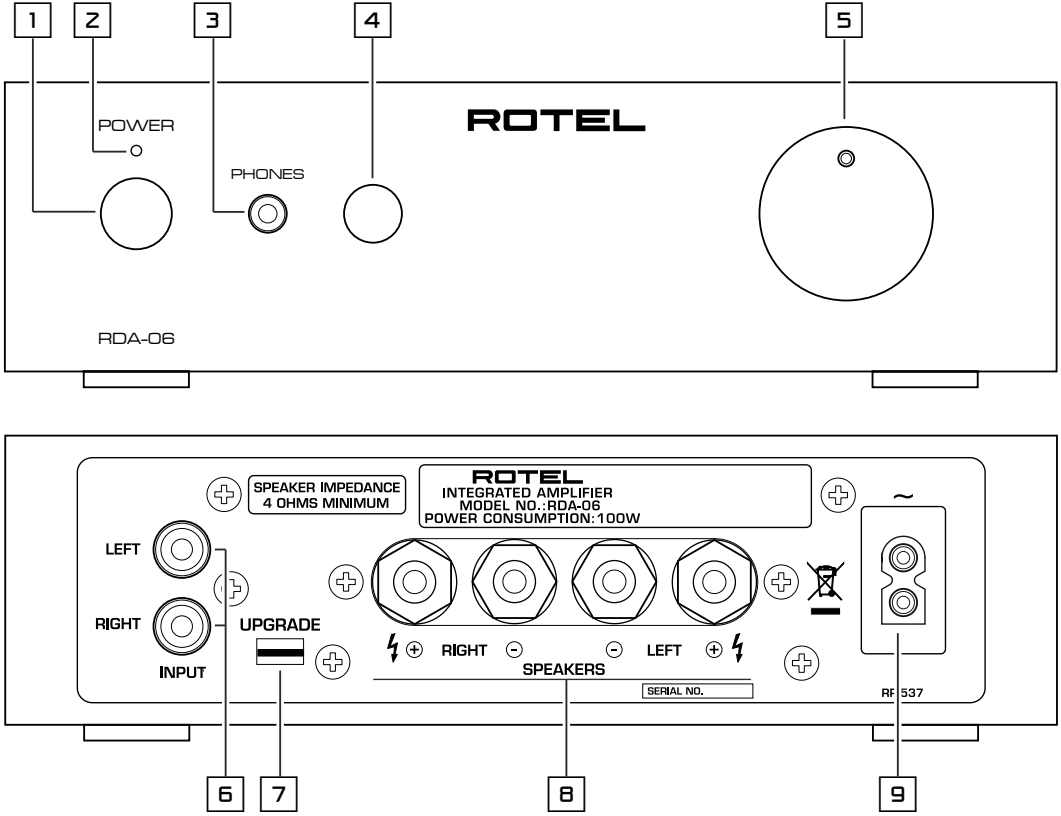
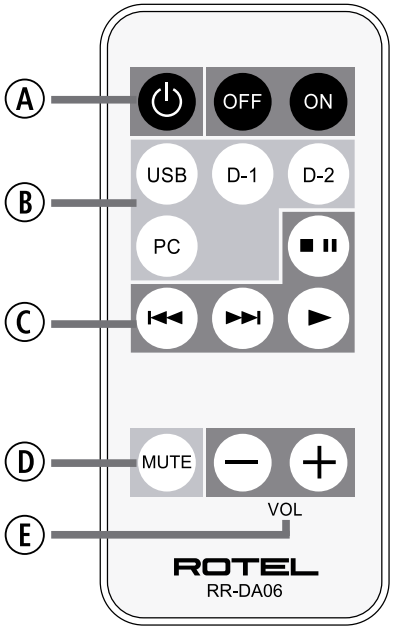


Figure 2: Remote Control



Ⓐ Power Toggle and Power On/Off Button.

Ⓑ Input selectors D-1 and D-2 toggles between Coaxial and Optical. [For use with Rotel RDD-06]

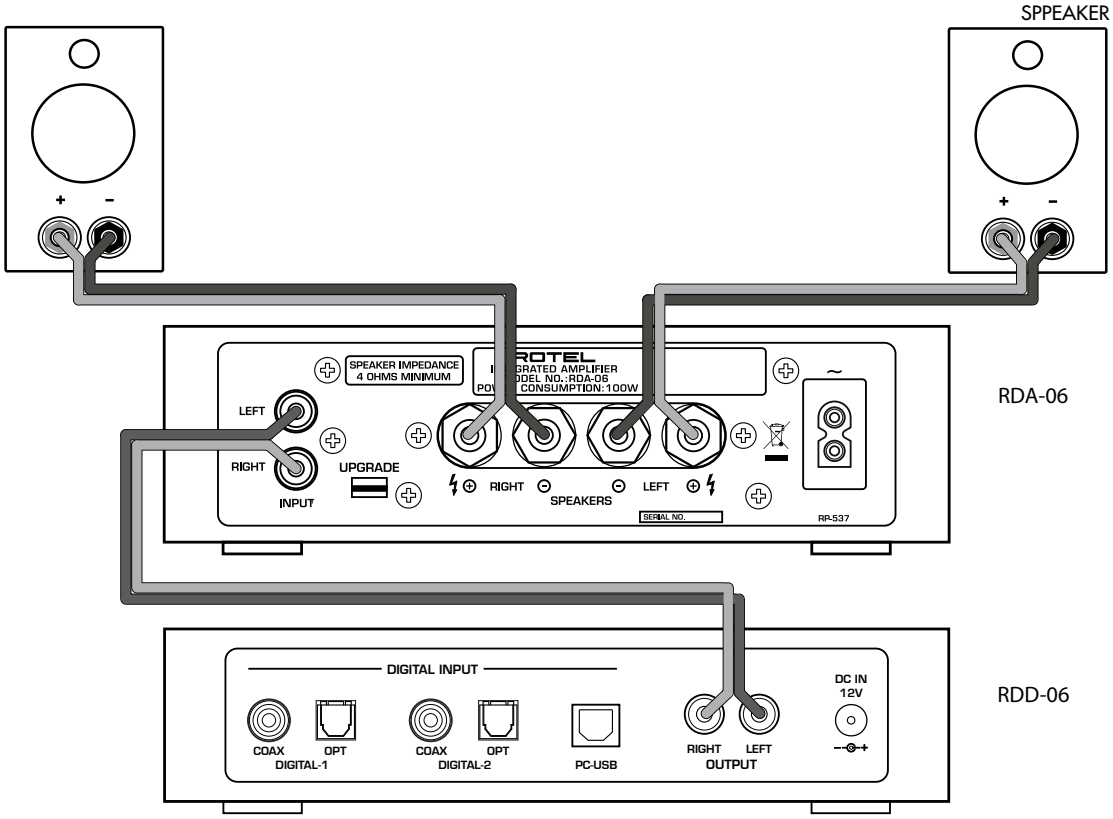
Ⓒ Playback buttons. Used to control USB device connected to the front USB. [For use with Rotel RDD-06]

Ⓓ Mute button to mute the volume.

Ⓔ Volume controls.

Note: Remove protective battery sheet before use.

Figure 3: Inputs and Speaker Outputs Connection



Important Notes

When making connections be sure to:

✔ Turn off **all** the components in the system **before** hooking up **any** components, including loudspeakers.

✔ Turn off **all** components in the system **before** changing **any** of the connections to the system.

It is also recommended that you:

✔ Turn the volume control of the amplifier all the way down **before** the amplifier is turned **on or off.**

Remarques importantes

Pendant les branchements, assurez-vous que :

✔ **Tous** les maillons sont éteints **avant** leur branchement, **quels qu'ils soient**, y compris les enceintes acoustiques.

✔ Éteignez **tous** les maillons **avant** de modifier **quoi que ce soit** au niveau de leurs branchements, quels qu'ils soient.

Il est également recommandé de :

✔ Toujours baissez le niveau sonore via le contrôle de volume, **avant d'allumer ou d'éteindre** l'amplificateur.

Wichtige Hinweise

Achten Sie beim Herstellen der Verbindungen auf Folgendes:

✔ Schalten Sie **alle** Komponenten im System ab, **bevor** Sie Geräte (einschließlich Lautsprecher) anschließen.

✔ Schalten Sie **alle** Komponenten im System ab, **bevor** Sie Anschlüsse im System verändern.

Ferner empfehlen wir, dass

✔ Sie die Lautstärke herunterdrehen, **bevor** Sie den Verstärker **ein-** oder **ab**schalten.

Notas Importantes

Cuando realice las conexiones, asegúrese de que:

✔ Desactiva **todos** los componentes del equipo, cajas acústicas incluidas, **antes** de conectar **cualquier nuevo componente** en el mismo.

✔ Desactiva **todos** los componentes del equipo **antes** de cambiar **cualquier conexión del mismo.**

También le recomendamos que:

✔ Reduzca el nivel de volumen de su amplificador a cero **antes** de **activarlo o desactivarlo.**

Héél belangrijk:

Bij het maken van de verbindingen:

✔ Zorg dat niet alleen de RDA-06 maar de **gehele** installatie uitstaat, als nog niet **alle** verbindingen gemaakt zijn.

✔ Zorg dat niet alleen de RDA-06, maar de **gehele** installatie ook uitstaat, **als** u verbindingen gaat **wijzigen.**

Wij raden u ook aan om

✔ de volumeregelaar van de voorversterker geheel dicht te draaien (volkomen naar links) **wanneer** u uw eindversterker **aan- of uitzet.**

Note importanti

Quando effettuate i collegamenti assicuratevi di:

✔ Spegnere **tutti** i componenti del sistema **prima** di collegare **qualsiasi** componente, inclusi i diffusori.

✔ Spegnere **tutti** i componenti del sistema **prima** di modificare **qualsiasi** connessione nel sistema.

Vi raccomandiamo inoltre di:

✔ Portare il volume a zero **prima** di **accendere o spegnere** l'amplificatore.

Viktigt

Tänk på följande när du gör anslutningar:

✔ Stäng av **alla** apparater i anläggningen **innan** du ansluter nya komponenter eller högtalare.

✔ Stäng av **alla** apparater i anläggningen **innan** du ändrar någon anslutning.

Du rekommenderas också:

✔ Vrida ner volymen på förförstärkaren helt och hållet **innan** förstärkaren slås **på eller av.**

Перед подсоединением:

✔ Выключите **все** компоненты, включая колонки.

✔ Выключите **все** компоненты в вашей системе, прежде чем что-то в ней **менять**.

Рекомендуется также:

✔ Вывести громкость усилителя на **минимум**, перед тем как **включать или выключать** его.

About Rotel

Our story began over 50 years ago. Over the decades, we have received hundreds of awards for our products and satisfied hundreds of thousands of people who take their entertainment seriously- like you!

Rotel was founded by a family whose passionate interest in music led them to manufacture high-fidelity components of uncompromising quality. Through the years, that passion has remained undiminished and the family goal of providing exceptional value for audiophiles and music lovers, regardless of their budget, is shared by all Rotel employees.

Rotel's engineers work as a close team, listening to, and fine tuning, each new product until it reaches their exacting musical standards. They are free to choose components from around the world in order to make that product the best they can. You are likely to find capacitors from the United Kingdom and Germany, semiconductors from Japan or the United States, while toroidal power transformers are manufactured in Rotel's own factory.

We all have concerns about our environment. And, as more and more electronics are produced and later discarded, it is especially important for a manufacturer to do all it can to engineer products that have a minimum negative impact on landfill sites and water tables.

At Rotel, we are proud to do our part. We have reduced the lead content in our electronics by using special ROHS solder, while our new Class D (not digital) amplifiers are up to five times more efficient than our legacy designs and still deliver power and performance. These products run cool, give minimum wasted energy, are good for the environment and give better sound too.

Finally, we have printed this brochure on recycled paper stock.

While we understand that these are small first steps, they are still important ones. And we continue to pursue new methods and materials for a cleaner and greener manufacturing process.

All of us at Rotel thank you for buying this product. We are sure it will bring you many years of enjoyment.

Getting Started

Thank you for purchasing the Rotel RDA-06 Integrated Amplifier. When used in a high-quality music or home theater system, your Rotel product will provide years of musical enjoyment.

A Few Precautions

Please read this manual carefully. In addition to basic installation and operating instructions, it provides valuable information on various RDA-06 system configurations as well as general information that will help you get optimum performance from your system. Please contact your authorized Rotel dealer for answers to any questions you might have. In addition, all of us at Rotel welcome your questions and comments.

Save the shipping carton and all enclosed packing material for future use. Shipping or moving the RDA-06 in anything other than the original packing material may result in severe damage that is not covered by the warranty.

Fill out and send in the owner's registration card packed with the RDA-06. Also be sure to keep the original sales receipt. It is your best record of the date of purchase, which you will need in the event warranty service is ever required.

Placement

Place the RDA-06 on a solid, level surface away from sunlight, heat, moisture, or vibration.

Don't stack other components or objects on top of the RDA-06. Don't let any liquid fall into the unit.

The RDA-06 generates heat during normal operation. Allow a minimum of 10 cm or 4 inches of unobstructed space around the unit.

Power and Control

Power Input 9

Your RDA-06 is configured at the factory for the proper AC voltage in the country where you purchased it, either 120 volts or 230 volts. The AC line configuration is noted on a decal on the back panel.

NOTE: *Should you move your amplifier to another country, it may be possible to reconfigure it for use on a different line voltage. Do not attempt to perform this conversion yourself. Opening the enclosure of the RDA-06 exposes you to dangerous voltages. Consult a qualified service person or the Rotel factory service department for information.*

NOTE: *Some products are intended for sale in more than one country and as such are supplied with more than one AC cord. Please use only the cord appropriate for your country/region.*

The RDA-06 should be plugged directly into a 2-pin polarized wall outlet or into the switched outlet on another component in your audio system. Do not use an extension cord.

Connect the supplied power cord to the AC Power Receptacle 9 on the rear of the RDA-06 and the AC power outlet.

If you are going to be away from home for an extended period of time such as a month-long vacation, it is a sensible precaution to unplug the RDA-06 (as well as other audio and video components) while you are away.

Power Switch 1 and Indicator Light 2

The power switch is located on the left side of the front panel. Push the power button to turn ON the unit.

The indicator light will light RED if the unit is plugged in, indicating the unit is in Standby mode. When the unit is turned on, the Indicator Light will turn BLUE and LED of volume control knob 5 will also be illuminated.

Input Signal Connections 6

See Figure 3

The RDA-06 has conventional RCA type input connectors, the type found on nearly all audio equipment. Select high quality audio interconnect cables for connecting to the RDA-06. Ask your authorized Rotel dealer for advice about cables.

NOTE: *To prevent loud potentially damaging noises, make sure the RDA-06 is turned off when you make any changes to the input signal configuration.*

Speaker Outputs

See Figure 3

Speaker Selection

The nominal impedance of the loudspeakers connected to each channel of the RDA-06 should be no lower than 4 ohms.

Speaker Wire Selection

Use insulated two-conductor stranded wire to connect the RDA-06 to the speakers. The size and quality of the wire can have an audible effect on the performance of the system. Standard speaker wire will work, but can result in lower output or diminished bass response, particularly over longer distances. In general, heavier wire will improve the sound. For best performance, you may want to consider special high-quality speaker cables. Your authorized Rotel dealer can help in the selection of cables for your system.

Polarity and Phasing

The polarity – the positive/negative orientation of the connections – for every speaker and amplifier connection must be consistent so all the speakers will be in phase. If the polarity of one connection is reversed, bass output will be very weak and stereo imaging degraded. All wire is marked so you

can identify the two conductors. There may be ribs or a stripe on the insulation of one conductor. The wire may have clear insulation with different color conductors (copper and silver). There may be polarity indications printed on the insulation. Identify the positive and negative conductors and be consistent with every speaker and amplifier connection.

Speaker Connections

NOTE: *The following text describes both binding post and plug-in connections. DO NOT use both connection methods in combination to connect multiple speakers.*

Turn off all the components in the system before connecting the speakers. The RDA-06 has one set of color coded binding posts. These connectors accept bare wire, connector lugs, or dual banana type connectors (except in the European Community countries where their use is not permitted).

Route the wire from the amplifier to the speakers. Give yourself enough slack so you can move the components to allow access to the speaker connectors.

If you are using dual banana plugs, connect them to the wires and then plug into the backs of the binding posts. The thumbscrews of the binding posts should be screwed in all the way (clockwise).

If you are using terminal lugs, connect them to the wires. If you are attaching bare wires directly to the binding posts, separate the wire conductors and strip the insulation from the end of each conductor. Be careful not to cut into the wire strands. Unscrew (turn counterclockwise) the binding post. Place the connector lug or wire around the binding post shaft. Turn the binding post clockwise to clamp the connector lug or wire firmly in place.

NOTE: *Be sure there are no loose wire strands that could touch adjacent wires or connectors.*

Headphone Output 3

The headphone output allows you to connect headphones for private listening. This output accepts a standard 3.5mm (1/8″) mini stereo headphone connector. Plugging in a set of headphones will mute the signal to the speaker outputs.

NOTE: *Because the sensitivity of speakers and headphones can vary widely, always reduce the volume level before connecting or disconnecting headphones.*

Remote Sensor 4

This is the sensor for receiving IR signals from the supplied remote control. Please do not block this sensor.

Rear USB Upgrade 7

The rear mini USB socket labeled UPGRADE is for updating the RDA-06 and should be handled only by a certified technician.

Troubleshooting

Most difficulties in audio systems are the result of poor or wrong connections, or improper control settings. If you encounter problems, isolate the area of the difficulty, check the control settings, determine the cause of the fault and make the necessary changes. If you are unable to get sound from the RDA-06, refer to the suggestions for the following conditions:

Power Indicator Is Not Illuminated

The Power Indicator should be illuminated whenever the unit is plugged into the wall power outlet. If it does not light RED, test the power outlet with another electrical device, such as a lamp. Be sure the power outlet being used is not controlled by a switch that has been turned off.

No Sound

Check the signal source to see if it is functioning properly. Make sure the cables from the signal source to the amplifier inputs are connected properly. Check the wiring between the amplifier and the speakers.

Specifications

Continuous Power Output *(20-20 kHz, < 0.05%, 8 ohms)*
20 watts/channel

Total Harmonic Distortion *(20Hz-20kHz, 8 ohms)*
< 0.03%

Intermodulation Distortion *(60 Hz : 7 kHz, 4:1)*
< 0.03%

Frequency Response *(+1.0dB, –3dB)*
10 Hz - 40 kHz

Damping Factor *(20-20,000 Hz, 8 ohms)*
120

Input Impedance/Sensitivity
50k Ohms/ 180 mV

Input Overload
> 5.0 V

Speaker Impedance
4 ohms minimum

Signal to Noise Ratio *(IHF "A" weighted)*
96 dB

Power Requirements
USA: 120 Volts, 60 Hz
Europe: 230 Volts, 50 Hz

Power Consumption
100 Watts

Standby Power Consumption
0.5 Watts

Dimension *(W x H x D)*
200 x 58 x 184 mm
$7\,^{7}/_{8}$ x $2\,^{1}/_{2}$ x $7\,^{1}/_{4}$ in

Weight
1.57 kg/3.47 lbs

All specifications are accurate at the time of printing.
Rotel reserves the right to make improvements without notice.

Rotel and the Rotel Hifi logo are registered trademarks of The Rotel Co., Ltd. Tokyo, Japan.

The Rotel Co. Ltd.
Tachikawa Bldg. 1F.,
2-11-4, Nakane, Meguro-ku,
Tokyo,152-0031
Japan

Rotel of America
54 Concord Street
North Reading, MA 01864-2699
USA
Phone: +1 978-664-3820
Fax: +1 978-664-4109

Rotel Europe
Dale Road
Worthing, West Sussex BN11 2BH
England
Phone: + 44 (0)1903 221 761
Fax: +44 (0)1903 221 525

www.rotel.com

082 OMRDA06 060913 English